

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number

10/596954

Filing Date

December 17, 2004

First Named Inventor

CARTER, CHAD J.

Confirmation Number

2894

Attorney Case Number

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U.S. Patent Documents

Exam. Init.*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
	A1	US3970518	7.2.1976	Giaever	
	A2	US4001197	1.4.1977	Mitchell et al.	
	A3	US4204041	5.20.1980	Bailey et al.	
	A4	US4233029	11.11.1980	Columbus et al.	
	A5	US4229537	10.21.1980	Hodgins et al.	
	A6	US4986914	1.22.1991	Franks	
	A7	US5012668	5.7.1991	Haworth	
	A8	US5076094	12.31.1991	Frye et al.	
	A9	US5117146	5.26.1992	Martin et al.	
	A10	US5120594	6.9.1992	Mrozinski	
	A11	US5151110	9.29.1992	Bein et al.	
	A12	US5235235	8.10.1993	Martin et al.	
	A13	US5238623	8.24.1993	Mrozinski	
	A14	US5246846	9.21.1993	Pittner et al.	
	A15	US5362421	11.8.1994	Kropp et al.	
	A16	US5531878	7.2.1996	Vadgama et al.	
	A17	US5552272	9.3.1996	Bogart	
	A18	US5639671	6.17.1997	Bogart et al.	
	A19	US5674742	10.7.1997	Northrup et al.	
	A20	US5685939	11.11.1997	Wolk et al.	
	A21	US5763283	6.9.1998	Cernosek et al.	
	A22	US5759625	6.2.1998	Laubacher et al.	
	A23	US5814525	9.29.1998	Renschler et al.	
	A24	US5836203	11.17.1998	Martin et al.	
	A25	US5849208	12.15.1998	Hayes et al.	
	A26	US5866195	2.2.1999	Lemelson	
	A27	US5880552	3.9.1999	McGill et al.	
	A28	US5888594	3.30.1999	David et al.	

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Substitute for form 1449A/PTO (modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) Page 2 of 5	Application Number	10/596954
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		Doc. Number-(Kind Code if Known)			
	A29	US5948166	9.7.1999	David et al.	
	A30	US6062091	5.16.2000	Baumuel	
	A31	US6146510	11.14.2000	Leader et al.	
	A32	US6156270	12.5.2000	Buechler	
	A33	US6232139 B1	5.15.2001	Casalnuovo et al.	
	A34	US6287894B1	9.11.2001	Sawin	
	A35	US6334980B1	1.1.2002	Hayes et al.	
	A36	US6352758B1	3.5.2002	Huang et al.	
	A37	US6369893B1	4.9.2002	Christel et al.	
	A38	US6372954B1	4.16.2002	Johnson et al.	
	A39	US6556105B1	4.29.2003	Nguyen et al.	
	A40	US6559474B1	5.6.2003	Craighead et al.	
	A41	US6573338	6.3.2003	Halverson et al.	
	A42	US6656428B1	12.2.2003	Clark et al.	
	A43	US6696304B1	2.24.2004	Davies	
	A44	US7169933 B2	1.30.2007	Benson et al.	
	A45	US7175876	2.13.2007	Free et al.	
	A46	US7179923 B2	2.20.2007	Benson et al.	
	A47	US2001/0028953A1	10.11.2001	Bluem et al.	
	A48	US2002/0192841A1	12.19.2002	Kojima	
	A49	US2003/0170881A1	9.11.2003	Davis et al.	
	A50	US2003/0203101A1	10.30.2003	Haubrich et al.	
	A51	US2003/0218130A1	11.27.2003	Boschetti et al.	
	A52	US2004/0265492A1	12.30.2004	Free et al.	
	A53	US2005/0106709A1	5.19.2005	Benson et al.	
	A54	US2005/0107615A1	5.19.2005	Benson et al.	
	A55	US2005/0112672A1	5.26.2005	Benson et al.	
	A56	US2005/0142296A1	6.30.2005	Lakshmi	

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		Doc. Number-(Kind Code if Known)			
	A57	US2005/0153370A1	7.14.2005	Lakshmi et al.	
	A58	US2005/0227076A1	10.13.2005	Benson et al.	
	A59	US2006/0019330A1	1.26.2006	Lakshmi et al.	
	A60	US2006/0135718A1	6.22.2006	Benson et al.	
	A61	US2006/0135783A1	6.22.2006	Benson et al.	
	A62	US2007/0065490A1	3.22.2007	Schaberg et al.	
	A63	US2007/0068256A1	3.29.2007	Xu et al.	
	A64	US2007/0190662A1	8.16.2007	Baetzold et al.	
	A65	US-			

Foreign Patent Documents							
Exam. Init.*	Cite No.	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation (Check if yes)
		Ctry. Code	Number-KindCode (If known)				
	B1	CA	2369720A1	7.30.2003			
	B2	FR	2612297A	9.16.1988			English Abstract
	B3	GB	1130593A	10.16.1968			
	B4	EP	0840369A	5.6.1998			
	B5	EP	0 016 552 B1, B2	10.1.1980			
	B6	EP	0 016 552 A1	10.1.1980			
	B7	EP	0657737A2	6.14.1995			
	B8	JP	09 162693A	6.20.1997			English Abstract
	B9	JP	5043600	2.23.1993			English Abstract
	B10	WO	00/16903	3.30.2000			
	B11	WO	01/23892A1	4.5.2001			
	B12	WO	02/095940A1	11.28.2002			
	B13	WO	02/094890A1	11.28.2002			
	B14	WO	05/075973A2	8.18.2005			
	B15	WO	05/066622A1	7.21.2005			

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		Ctry. Code	Number-KindCode (If known)				
	B16	WO	05/066621A1	7.21.2005			
	B17	WO	05/066092	7.21.2005			
	B18	WO	05/064349A2	7.14.2005			
	B19	WO	03/098206A1	11.27.2003			
	B20	WO	02/090565 A2	11.14.2002			
	B21	WO	01/66820 A1	9.13.2001			
	B22	WO	00/70040 A1	11.23.2000			
	B23	WO	02/088296A1	11.7.2002			
	B24	WO	99/09923 A1	3.4.1999			
	B25						
	B26						
	B27						

OTHER DOCUMENTS			
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Translation (Check if yes)
	C1	Rapp, M., et al. NEW MINIATURIZED SAW-SENSOR ARRAY FOR ORGANIC GAS DETECTION DRIVEN BY MULTIPLEXED OSCILLATORS, Sensors and Actuators B, Elsevier Sequoia S.A., Lausanne, Ch, Vol. 65, No. 1-3, June 30, 2000, pp 169-172, ISSN: 0925-4005 (whole document)	
	C2	Kim et al., "Impedance characterization of a piezoelectric immunosensor part II: <i>Salmonella typhirium</i> detection using magnetic enhancement," Biosensors and Bioelectronics, 18: 91-99 (2003).	
	C3	Du, J., et al. LOVE WAVE ACOUSTIC IMMUNOSENSOR OPERATING IN LIQUID, Sensors and Actuators A., Elsevier Sequoia S.A., Lausanne, Ch, Vol. 61, No. 1-3, June 1997, pp 279-286, ISSN: 0924-4247 (whole document)	
	C4	Du et al., A STUDY OF LOVE-WAVE ACOUSTIC SENSORS, Sensors and Actuators A, 56 (1996) pp. 211-219	
	C5	David et al., PLASMA DEPOSITION AND ETCHING OF DIAMOND-LIKE CARBON FILMS, AIChE Journal, 37(3): 367-376 (March 1991).	
	C6	Branch et al., "Low-level detection of a Bacillus anthracis simulant using Love-wave biosensors on 36°YXLiTaO ₃ ," Biosensors and Bioelectronics (accepted 22 August 2003).	
	C7	Grate, J.W. et al., ACOUSTIC WAVE SENSORS, Sensor Update, Vol. 2, 1996, p 38-83, ISBN: 3-527-29432-5, pg 45, paragraph 2.2.7; figures 2.1.2.4; tables 2.1.2.2	

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	C8	Tamarin et al., STUDY OF ACOUSTIC LOVE WAVE DEVICES FOR REAL TIME BACTERIOPHAGE DETECTION, Sensors and Actuators B, 91 (2003) pp. 275-284	
	C9	Shah, R.R., et al., "Using Liquid Crystals To Image Reactants and Products of Acid-Base Reactions on Surfaces with Micrometer Resolution", J. Am. Chem. Soc., 1999, 121, 11300-11310	
	C10	Shah, R.R., et al., "Principles for Measurement of Chemical Exposure Based on Recognition-Driven Anchoring Transitions in Liquid Crystals", Science, 2001, 293, 1296.	
	C11	Wagner, P., et al., "Covalent Immobilization of Native Biomolecules onto Au(111) via N-Hydroxysuccinimide Ester Functionalized Self-Assembled Monolayers for Scanning Probe Microscopy", Biophysical. Journal, 1996, Vol. 70, 2052-2066	
	C12	Wang, J., et al. "Ultrathin Porous Carbon Films as Amperometric Transducers for Biocatalytic Sensors", Anal. Chem. 1994, 66, 1988-1992	
	C13		
	C14		
	C15		

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